

# Precision Turned Product Manufacturing: 2002

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## 2002 Economic Census

*Manufacturing*

Industry Series



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U.S. Department of Commerce  
Economics and Statistics Administration  
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-- Not applicable for this report.

# Table 1. Historical Statistics for the Industry: 2002 and Earlier Years

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry and year <sup>1</sup>	Com- panies <sup>2</sup>	All estab- lish- ments <sup>3</sup>	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)	
			Number <sup>4</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)					
332721, Precision turned product manufacturing .....	2002..	2 831	2 892	77 320	2 839 573	60 163	121 069	1 977 404	6 013 043	2 822 650	8 835 582	'533 188
	2001..	N	N	71 709	2 557 064	57 220	116 877	1 759 844	5 082 694	2 514 964	7 655 096	431 944
	2000..	N	N	77 833	2 792 494	62 088	128 985	1 940 175	5 737 521	2 836 909	8 561 233	587 144
	1999..	N	N	77 165	2 690 491	61 164	128 295	1 845 941	5 477 671	2 717 212	8 210 666	582 423
	1998..	N	N	81 380	2 720 775	65 412	139 259	1 887 873	5 732 751	2 872 322	8 616 746	652 674
	1997..	2 696	2 745	80 225	2 629 738	63 556	136 140	1 809 381	5 493 232	2 846 618	8 304 805	578 189

<sup>1</sup>Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

<sup>2</sup>For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

<sup>3</sup>Includes establishments with payroll at any time during the year.

<sup>4</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 2. Industry Statistics for Selected States: 2002**

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

Industry and geographic area	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>3</sup>	Hours (1,000)	Wages (\$1,000)				
332721, Precision turned product manufacturing												
United States .....	1	2 892	1 125	77 320	2 839 573	60 163	121 069	1 977 404	6 013 043	2 822 650	8 835 582	'533 188
Alabama .....	1	26	6	373	11 017	283	501	7 578	30 490	13 517	44 048	'1 572
Arizona .....	—	37	16	1 053	38 584	902	1 860	30 152	71 258	34 993	106 554	'12 657
Arkansas .....	—	12	5	189	4 922	147	232	3 598	11 212	7 698	19 849	'1 300
California .....	1	386	128	8 121	293 108	6 264	12 259	201 433	630 380	231 850	857 900	'36 953
Colorado .....	3	34	8	554	19 332	449	721	13 503	39 387	12 763	51 987	'2 744
Connecticut .....	1	145	52	3 362	131 252	2 636	5 099	90 154	268 827	114 865	381 987	'13 793
Florida .....	1	57	19	1 175	38 851	921	1 882	28 367	84 119	30 397	114 437	'4 060
Georgia .....	1	26	9	683	21 577	446	948	14 499	57 877	29 351	87 216	'9 778
Illinois .....	1	214	101	7 670	286 385	5 944	12 297	195 585	575 853	269 093	843 817	'53 141
Indiana .....	—	95	46	3 906	136 444	3 162	6 289	101 900	277 579	148 810	428 168	'38 556
Iowa .....	3	36	22	1 317	44 489	1 064	2 071	32 387	90 720	53 080	144 500	'4 128
Kansas .....	1	21	7	544	18 363	401	770	11 523	44 123	16 192	60 407	'4 965
Kentucky .....	—	25	14	604	18 519	459	877	12 037	35 661	17 980	53 748	'3 157
Louisiana .....	1	17	7	450	16 141	332	695	9 669	39 802	15 379	54 162	'7 373
Massachusetts .....	1	85	36	1 868	76 790	1 388	2 874	51 353	165 505	59 028	226 865	'17 179
Michigan .....	1	268	131	9 200	360 032	7 105	14 942	245 600	835 826	469 430	1 308 566	'77 696
Minnesota .....	2	89	37	2 491	100 553	2 001	4 249	75 078	195 904	97 779	293 894	'16 988
Missouri .....	—	54	21	1 620	51 546	1 243	2 298	37 696	109 442	59 205	169 566	'5 390
Nevada .....	—	11	2	148	5 454	110	225	3 731	13 402	3 380	16 678	'262
New Hampshire .....	—	24	7	559	22 114	446	905	16 257	46 812	11 905	58 877	'6 519
New Jersey .....	3	84	20	1 418	60 466	1 108	2 322	41 055	131 953	39 065	171 802	'4 742
New York .....	2	165	65	4 873	170 643	3 729	7 345	117 516	316 664	185 252	499 184	'36 695
North Carolina .....	4	50	18	922	31 627	688	1 341	21 319	89 479	25 641	115 109	'3 599
Ohio .....	2	246	110	8 000	286 517	6 357	13 085	203 038	636 747	312 546	950 656	'50 017
Oklahoma .....	1	28	6	485	16 095	353	622	11 686	29 391	16 799	45 225	'1 545
Oregon .....	—	26	12	526	22 386	418	853	16 485	44 181	14 965	60 251	'16 439
Pennsylvania .....	2	136	50	4 019	143 181	3 230	6 545	103 045	274 983	148 199	421 700	'21 630
Rhode Island .....	2	23	3	183	6 390	148	313	4 572	11 090	4 615	15 798	'908
South Carolina .....	2	21	10	585	20 692	461	926	14 315	60 049	31 095	88 605	'4 760
Tennessee .....	2	35	17	905	29 947	720	1 435	21 132	59 134	27 666	86 840	'3 881
Texas .....	2	144	46	2 989	118 810	2 252	4 766	81 096	256 632	90 347	344 699	'31 765
Virginia .....	—	17	9	399	14 023	304	541	9 897	30 051	9 506	40 254	'1 102
Washington .....	—	46	10	838	34 499	599	1 046	23 377	67 620	32 567	101 901	'2 780
Wisconsin .....	—	113	44	2 895	108 583	2 254	4 409	73 470	224 625	115 657	339 985	'19 483

<sup>1</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

<sup>2</sup>Includes establishments with payroll at any time during the year.

<sup>3</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

# Table 3. Detailed Statistics by Industry: 2002

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
332721, Precision turned product manufacturing	
Companies <sup>1</sup> .....	number.. 2 831
All establishments <sup>2</sup> .....	number.. 2 892
Establishments with 1 to 19 employees .....	number.. 1 767
Establishments with 20 to 99 employees .....	number.. 997
Establishments with 100 employees or more .....	number.. 128
All employees <sup>3</sup> .....	number.. 77 320
Total compensation .....	\$1,000.. 3 367 275
Annual payroll .....	\$1,000.. 2 839 573
Total fringe benefits .....	\$1,000.. 527 702
Production workers, average for year .....	number.. 60 163
Production workers on March 12 .....	number.. 60 028
Production workers on May 12 .....	number.. 60 434
Production workers on August 12 .....	number.. 60 266
Production workers on November 12 .....	number.. 59 712
Production worker hours .....	\$1,000.. 121 069
Production worker wages .....	\$1,000.. 1 977 404
Total cost of materials .....	\$1,000.. 2 822 650
Materials, parts, containers, packaging, etc., used .....	\$1,000.. 2 101 342
Resales .....	\$1,000.. 158 331
Purchased fuels .....	\$1,000.. 20 936
Purchased electricity .....	\$1,000.. 106 364
Contract work .....	\$1,000.. 435 677
Quantity of electricity purchased for heat and power .....	1,000 kWh.. 1 581 632
Quantity of electricity generated less sold for heat and power .....	1,000 kWh.. S
Total value of shipments .....	\$1,000.. 8 835 582
Primary products value of shipments .....	\$1,000.. 7 786 866
Secondary products value of shipments .....	\$1,000.. 667 431
Total miscellaneous receipts .....	\$1,000.. 381 285
Value of resales .....	\$1,000.. 218 734
Contract receipts .....	\$1,000.. 79 927
Other miscellaneous receipts .....	\$1,000.. 82 624
Primary products specialization ratio .....	percent.. 92
Value of primary products shipments made in all industries .....	\$1,000.. 8 534 900
Value of primary products shipments made in this industry .....	\$1,000.. 7 786 866
Value of primary products shipments made in other industries .....	\$1,000.. 748 034
Coverage ratio .....	percent.. 91
Value added .....	\$1,000.. 6 013 043
Total inventories, beginning of year .....	\$1,000.. 1 071 035
Finished goods inventories .....	\$1,000.. 429 983
Work-in-process inventories .....	\$1,000.. 373 035
Materials and supplies inventories .....	\$1,000.. 268 017
Total inventories, end of year .....	\$1,000.. 1 061 346
Finished goods inventories .....	\$1,000.. 437 720
Work-in-process inventories .....	\$1,000.. 365 409
Materials and supplies inventories .....	\$1,000.. 258 217
Gross value of depreciable assets (acquisition costs) at beginning of year .....	\$1,000.. '5 457 047
Total capital expenditures (new and used) .....	\$1,000.. '533 188
Buildings and other structures (new and used) .....	\$1,000.. '72 161
Machinery and equipment (new and used) .....	\$1,000.. '461 027
Automobiles, trucks, etc., for highway use .....	\$1,000.. '19 126
Computers and peripheral data processing equipment .....	\$1,000.. '45 696
All other expenditures for machinery and equipment .....	\$1,000.. '396 205
Total retirements .....	\$1,000.. '268 454
Gross value of depreciable assets at end of year .....	\$1,000.. '5 721 781
Depreciation charges during year .....	\$1,000.. '416 506
Total rental payments .....	\$1,000.. 242 051
Buildings and other structures .....	\$1,000.. 142 220
Machinery and equipment .....	\$1,000.. 99 831
Total other expenses <sup>4</sup> .....	\$1,000.. 706 137
Response coverage ratio <sup>5</sup> .....	percent.. 82
Repair and maintenance services of buildings and/or machinery <sup>4</sup> .....	\$1,000.. 82 123
Communications services <sup>4</sup> .....	\$1,000.. 19 744
Legal services <sup>4</sup> .....	\$1,000.. 11 255
Accounting, auditing, and bookkeeping services <sup>4</sup> .....	\$1,000.. 18 935
Advertising and promotional services <sup>4</sup> .....	\$1,000.. 18 698
Expensed computer hardware and supplies and purchased computer services <sup>4</sup> .....	\$1,000.. 14 093
Refuse removal (including hazardous waste) services <sup>4</sup> .....	\$1,000.. 8 851
Management consulting and administrative services <sup>4</sup> .....	\$1,000.. 15 376
Taxes and license fees <sup>4</sup> .....	\$1,000.. 43 254
All other expenses <sup>4</sup> .....	\$1,000.. 473 808

<sup>1</sup>For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

<sup>2</sup>Includes establishments with payroll at any time during the year.

<sup>3</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

<sup>4</sup>Based on Annual Survey of Manufactures (ASM) sample data.

<sup>5</sup>A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 4. Industry Statistics by Employment Size: 2002**

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class	E <sup>1</sup>	All establishments <sup>2</sup>	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>3</sup>	Hours (1,000)	Wages (\$1,000)				
332721, Precision turned product manufacturing											
All establishments .....	1	2 892	77 320	2 839 573	60 163	121 069	1 977 404	6 013 043	2 822 650	8 835 582	'533 188
Establishments with—											
1 to 4 employees .....	8	529	g	D	D	D	D	D	D	D	D
5 to 9 employees .....	3	532	3 569	126 457	2 681	5 305	90 326	268 846	104 760	372 627	'17 513
10 to 19 employees .....	1	706	9 787	341 800	7 377	13 927	239 276	701 599	258 483	962 818	'57 852
20 to 49 employees .....	1	730	22 291	805 268	17 438	34 693	558 352	1 692 291	690 330	2 381 857	'163 934
50 to 99 employees .....	1	267	17 960	660 783	14 280	29 346	464 430	1 401 961	648 915	2 054 125	'118 780
100 to 249 employees .....	1	108	15 727	616 093	12 316	25 697	430 566	1 328 490	773 408	2 100 713	'121 147
250 to 499 employees .....	1	18	5 527	206 405	4 242	8 822	144 737	436 369	275 678	709 541	'46 611
500 to 999 employees .....	—	2	g	D	D	D	D	D	D	D	D
1,000 to 2,499 employees .....	—	—	—	—	—	—	—	—	—	—	—
2,500 employees or more .....	—	—	—	—	—	—	—	—	—	—	—
Administrative records <sup>4</sup> .....	9	594	1 987	74 532	1 659	3 382	53 925	150 748	76 482	227 230	'6 797

<sup>1</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

<sup>2</sup>Includes establishments with payroll at any time during the year.

<sup>3</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

<sup>4</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 5. Industry Statistics by Primary Product Class Specialization: 2002**

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry or product class code	Industry or primary product class	All establishments <sup>1</sup>	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number <sup>2</sup>	Payroll (\$1,000)	Number <sup>2</sup>	Hours (1,000)	Wages (\$1,000)				
332721	Precision turned product manufacturing .....	2 892	77 320	2 839 573	60 163	121 069	1 977 404	6 013 043	2 822 650	8 835 582	'533 188
3327211	Precision turned products, automotive .....	217	15 367	570 246	12 008	25 215	397 996	1 283 116	798 402	2 088 948	'134 691
3327215	Precision turned products (made on CNC equipment or screw machines), except automotive .....	1 124	42 279	1 574 081	32 602	65 595	1 086 460	3 268 821	1 438 612	4 703 131	'271 388

<sup>1</sup>Includes establishments with payroll at any time during the year.

<sup>2</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 6a. Products Statistics: 2002 and 1997**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
332721	Precision turned product manufacturing .....	2002.. N 1997.. N	X X	X X	8 534 900 8 006 106
3327211	Precision turned products, automotive .....	2002.. N 1997.. N	X X	X X	2 129 237 1 886 830
33272111	Precision turned products, automotive .....	2002.. N 1997.. N	X X	X X	2 129 237 1 886 830
3327211100	Precision turned products, automotive .....	2002.. 439 1997.. 409	X X	X X	2 129 237 1 886 830
3327215	Precision turned products (made on CNC equipment or screw machines), except automotive .....	2002.. N 1997.. N	X X	X X	4 367 298 4 135 005
33272151	Precision turned products (made on CNC equipment or screw machines), for aircraft .....	2002.. N 1997.. N	X X	X X	576 515 273 011
3327215111	Precision turned products (made on CNC equipment or screw machines), for aircraft .....	2002.. 264 1997.. 129	X X	X X	576 515 273 011
33272152	Precision turned products (made on CNC equipment or screw machines), for household appliances (including radio and television) .....	2002.. N 1997.. N	X X	X X	211 695 234 455
3327215222	Precision turned products (made on CNC equipment or screw machines), for household appliances (including radio and television) .....	2002.. 97 1997.. 139	X X	X X	211 695 234 455
33272153	Precision turned products (made on CNC equipment or screw machines), for electric and electronic equipment (except household appliances) .....	2002.. N 1997.. N	X X	X X	345 143 496 231
3327215333	Precision turned products (made on CNC equipment or screw machines), for electric and electronic equipment (except household appliances) .....	2002.. 257 1997.. 281	X X	X X	345 143 496 231
33272154	Precision turned products (made on CNC equipment or screw machines), for medical supplies .....	2002.. N 1997.. N	X X	X X	365 513 187 024
3327215444	Precision turned products (made on CNC equipment or screw machines), for medical supplies .....	2002.. 201 1997.. 122	X X	X X	365 513 187 024
33272155	Precision turned products (made on CNC equipment or screw machines), for other machinery .....	2002.. N 1997.. N	X X	X X	740 991 496 046
3327215555	Precision turned products (made on CNC equipment or screw machines), for other machinery .....	2002.. 450 1997.. 305	X X	X X	740 991 496 046
33272156	Precision turned products (made on CNC equipment or screw machines), for ordnance and all other end uses .....	2002.. N 1997.. N	X X	X X	1 358 364 1 164 494
3327215666	Precision turned products (made on CNC equipment or screw machines), for ordnance .....	2002.. 78 1997.. 57	X X	X X	79 086 36 315
3327215699	Precision turned products (made on CNC equipment or screw machines), for all other end uses .....	2002.. 543 1997.. 485	X X	X X	1 279 278 1 128 179
3327215Y	Precision turned products (made on CNC equipment or screw machines), except automotive, nsk .....	2002.. N 1997.. N	X X	X X	769 077 1 283 744
3327215YVV	Precision turned products (made on CNC equipment or screw machines), except automotive, nsk .....	2002.. N 1997.. N	X X	X X	769 077 1 283 744
332721W	Precision turned product manufacturing, nsk, total .....	2002.. N 1997.. N	X X	X X	2 038 365 1 984 271
332721WY	Precision turned product manufacturing, nsk, total .....	2002.. N 1997.. N	X X	X X	2 038 365 1 984 271
332721WYWW	Precision turned product manufacturing, nsk, for nonadministrative-record establishments .....	2002.. N 1997.. N	X X	X X	1 825 614 1 876 778
332721WYWY	Precision turned product manufacturing, nsk, for administrative-record establishments .....	2002.. N 1997.. N	X X	X X	212 751 107 493

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.



Table 6b. **Product Class Shipments for Selected States: 2002 and 1997**

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 2002. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographic definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS product class code	Product class and geographic area	Value of product shipments (\$1,000)
3327211	Precision turned products, automotive	
	United States.....	2002.. 2 129 237
		1997.. 1 886 830
	California.....	2002.. 22 897
		1997.. 10 709
	Connecticut.....	2002.. 26 851
		1997.. 29 142
	Florida.....	2002.. 8 681
		1997.. 7 193
	Illinois.....	2002.. 237 813
		1997.. 163 463
	Indiana.....	2002.. 145 211
		1997.. 109 930
	Iowa.....	2002.. 37 770
		1997.. 54 078
	Kentucky.....	2002.. 5 130
		1997.. 13 425
	Michigan.....	2002.. 841 210
		1997.. 808 384
	Minnesota.....	2002.. 5 176
		1997.. 10 270
	Missouri.....	2002.. 59 298
		1997.. 77 639
	New Jersey.....	2002.. 3 519
		1997.. 7 482
	New York.....	2002.. 117 508
		1997.. 133 728
	Ohio.....	2002.. 228 359
		1997.. 204 524
	Oregon.....	2002.. 4 719
		1997.. N
	Pennsylvania.....	2002.. 111 440
		1997.. 49 200
	South Carolina.....	2002.. 13 382
		1997.. N
	Tennessee.....	2002.. 29 869
		1997.. 32 298
	Texas.....	2002.. 12 515
		1997.. 6 973
	Washington.....	2002.. 2 081
		1997.. N
	Wisconsin.....	2002.. 77 622
		1997.. 51 700
3327215	Precision turned products (made on CNC equipment or screw machines), except automotive	
	United States.....	2002.. 4 367 298
		1997.. 4 135 005
	Alabama.....	2002.. 22 432
		1997.. N
	Arizona.....	2002.. 57 676
		1997.. 32 255
	Arkansas.....	2002.. 13 349
		1997.. 17 136
	California.....	2002.. 485 699
		1997.. 439 740
	Colorado.....	2002.. 24 662
		1997.. 22 006
	Connecticut.....	2002.. 237 240
		1997.. 211 511
	Florida.....	2002.. 59 201
		1997.. 81 883
	Georgia.....	2002.. 19 632
		1997.. 10 003
	Illinois.....	2002.. 447 659
		1997.. 494 891
	Indiana.....	2002.. 213 607
		1997.. 150 244
	Iowa.....	2002.. 45 001
		1997.. 20 546
	Kansas.....	2002.. 29 171
		1997.. N
	Kentucky.....	2002.. 30 290
		1997.. 43 774
	Louisiana.....	2002.. 30 815
		1997.. 14 439
	Massachusetts.....	2002.. 146 525
		1997.. 113 202
	Michigan.....	2002.. 281 118
		1997.. 341 253
	Minnesota.....	2002.. 206 717
		1997.. 262 658
	Missouri.....	2002.. 82 752
		1997.. 77 161
	Nevada.....	2002.. 8 717
		1997.. 4 561
	New Hampshire.....	2002.. 34 574
		1997.. 35 005
	New Jersey.....	2002.. 95 249
		1997.. 87 580
	New York.....	2002.. 260 766
		1997.. 351 455
	North Carolina.....	2002.. 107 182
		1997.. 31 659
	Ohio.....	2002.. 508 803
		1997.. 441 230
	Oklahoma.....	2002.. 33 049
		1997.. 20 868
	Oregon.....	2002.. 27 126
		1997.. 38 483
	Pennsylvania.....	2002.. 215 714
		1997.. 224 976

See footnotes at end of table.

Table 6b. **Product Class Shipments for Selected States: 2002 and 1997—Con.**

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 2002. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographic definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS product class code	Product class and geographic area	Value of product shipments (\$1,000)
3327215	Precision turned products (made on CNC equipment or screw machines), except automotive—Con.	
	United States—Con.	
	Rhode Island..... 2002..	8 567
	..... 1997..	10 178
	South Carolina ..... 2002..	61 470
	..... 1997..	31 120
	Tennessee ..... 2002..	24 227
	..... 1997..	34 217
	Texas ..... 2002..	148 224
	..... 1997..	126 841
	Virginia ..... 2002..	17 696
	..... 1997..	N
	Washington ..... 2002..	74 008
	..... 1997..	31 768
	Wisconsin ..... 2002..	155 253
	..... 1997..	194 144

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

**Table 7. Materials Consumed by Kind: 2002 and 1997**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Material code	Material consumed	Quantity	Delivered cost (\$1,000)
332721	Precision turned product manufacturing		
00900001	Total materials .....2002..	X	2 101 342
	.....1997..	X	2 099 708
33210000	Forgings .....2002..	X	109 888
	.....1997..	X	N
33200038	All other fabricated metal products (excluding castings, forgings, bolts, nuts, screws, washers, rivets, and other screw machine products) .....2002..	X	44 432
	.....1997..	X	N
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished) .....2002..	X	35 355
	.....1997..	X	N
33151001	Iron and steel castings (rough and semifinished) .....2002..	X	110 928
	.....1997..	X	N
33120071	Steel bars and bar shapes (excluding castings, forgings, and fabricated metal products) .....2002..	X	380 460
	.....1997..	X	435 578
33120016	Steel sheet and strip (including tinplate) .....2002..	X	25 362
	.....1997..	X	N
33120025	Steel wire and wire products .....2002..	X	20 778
	.....1997..	X	21 586
33120035	All other steel shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	20 447
	.....1997..	X	23 006
33142107	Copper and copper-base alloy rod, bar, and bar shapes (excluding castings, forgings, and fabricated metal products) .....2002..	X	86 026
	.....1997..	X	177 516
33142113	All other copper and copper-base alloy shapes and forms (excluding castings, forgings, fabricated metal products, rods, bars, mechanical wire, sheet, plate, and strip) .....2002..	X	D
	.....1997..	X	N
33131601	Aluminum and aluminum-base alloy extruded shapes (extruded rod, bar, pipe, tube, etc.) .....2002..	X	67 574
	.....1997..	X	N
33100059	All other aluminum and aluminum-base alloy shapes and forms (wire, rolled rod and bar, powder, welded tubing, etc.) .....2002..	X	15 508
	.....1997..	X	24 395
33100082	Other nonferrous metal shapes and forms (excluding aluminum and aluminum-base alloy and copper and copper-base alloy castings, forgings, and fabricated metal products) .....2002..	X	33 873
	.....1997..	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....2002..	X	11 719
	.....1997..	X	10 372
33510000	Special dies, tools, die sets, jigs, and fixtures (excluding cutting tools for machine tools) .....2002..	X	D
	.....1997..	X	38 792
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes .....2002..	X	8 791
	.....1997..	X	8 029
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products .....2002..	X	57 157
	.....1997..	X	N
33351503	Cutting tools for machine tools .....2002..	X	99 338
	.....1997..	X	N
00970099	All other materials and components, parts, containers, and supplies .....2002..	X	425 043
	.....1997..	X	992 631
00971000	Materials, ingredients, containers, and supplies, nsk .....2002..	X	545 982
	.....1997..	X	367 803

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.